

## . DEPA I MENI OF I HE INI E IO

.GEOLOGICAL J VEY

## CLAGGIFICATION OF UATEENAEY DE OGITG, GOUTHEEN CALIFOENIA AEEAL MA ING EOJECT (GCAM ) A working model

Version 1.0 09/10/2000



Disturbed ground Artificial fill	ALLJ VIAL DEPO II								COLLJ VIAL DEPO II		NON-MA INE BA IN-CENI E DEPO II		LOPE- FAILJ E DEPO II	MA INE AND PA ALIC DEPO II					(1) Age ± Ka	(2) (	(3)
Qdg Qaf 810	Wash deposits	Alluvial-fan deposits		Alluvial-valley deposits		lope-wash deposits	Pediment-	Colluvium	I alus	Lacustrine deposits	Playa deposits	Eolian deposits	Landslide deposits	Estuarine deposits	Marine deposits	Glacial deposits	egolith or paleosol	J ndifferen- tiated	± Ka		
verey youngJ ndissected surfaces; rilled to incised to veneered; older elements may have organic layer and (or) slight A horizon	Qw Qw <sub>2</sub>	Qf Qf <sub>2</sub>		Qa Qa <sub>2</sub>		Qsw	Qpv	Qc	Qt	Ql	Qp Qp <sub>2</sub>	Qe		Qes	Qm	Qg	Qr	Qs Qs <sub>2</sub>		19	Q4b
	Qw <sub>1</sub>	Qf <sub>1</sub>		Qa <sub>1</sub>							Qp <sub>1</sub>		7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7						(D)		Q4a
YOUNGJ ndissected to slightly dissected surfaces; A/Cox and Bcambic soils; slight pavement & varnish; slight K horizon and calcrete	Oyw.	Qyf	Qyf <sub>5</sub>		Qya <sub>5</sub>		Qypv	Qyc	Oyt	Qyi	Qyp	Qye	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Qyes	Qym	Qyg	Qyr.		Holocene	18	
			Qyf <sub>4</sub>		Qya <sub>4</sub>	Qysw												Qys	Ĭ		
			Qyf <sub>3</sub>	Qya	Qya <sub>3</sub>															17	
			Qyf <sub>2</sub>		Qya <sub>2</sub>															16	
			Qyf <sub>1</sub>		Qya <sub>1</sub>														1		
surfaces; good Bt horizon; 10Y to 5Y hues; continuous (±) clay films; moderate K hori zon; moderate pavement and some calcrete  VEEY OLDWell dissected surfaces; strong Bt horizon; 5Y to 10 hues; good prismatic structure; thick clay films on ped faces; strong K horizons & duripan; excellent pavement,	Qow	Qof	Qof <sub>3</sub>		Qoa <sub>3</sub>		Qopv	Qoc	Qot	Qol	Qop	Qoe	A A A A A A A A A A A A A A A A A A A	Qoes	Qom	Qog	Qor	Qos		15	
			Qof <sub>2</sub>	Qoa	Qoa <sub>2</sub>	Qosw													tocene	13	
			Qof <sub>1</sub>		Qoa <sub>1</sub>															12	
	Qyow	Qvof	Qvof <sub>3</sub>		Qvoa <sub>3</sub>				Qvot	Qvol	Qvop	Qvoe	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Qvoes	Qyom	Qvog	Qvor		Pleistor		
			Qvof <sub>2</sub>	Qvoa	Qvoa	Qvosw	Qvopv	Qvoc										Qvos		l 1	
			Qvof <sub>1</sub>		Qvoa <sub>1</sub>																

For CAMP geologic-map products, grain-size and physical-property information for surficial units is stored in digital data bases through the use of coded attributes (Matti and others, 1997). At the option of the geologic-map author, characteristic grain size information can be displayed in plot files through the use of alpha characters (e.g. Qyfb, Qoa<sub>2a</sub>), where the characters conform to the following definitions:

- a arenaceous (very coarse sand through very fine sand)
- b boulder gravel ( 25mm)
- g gravel (cobble through granule gravel)
- s silty
- c clayey
- m- marl
- p peat

- (1) Numerical time scale is not linear;
- (2)I errace-age designations proposed by McFadden (1982) and by Bull (1991, Figure 4.11) for alluvial deposits in Mediterranean-climate regimes of southern California;
- (3) Geomorphic-surface designations proposed by Bull (1991, I able 2-13) in arid climatic regimes of southern California

Bull, W. ., 1991, Geomorphic responses to climatic change: New York, Oxford J niversity Press, 326 p.

Matti, J.C., Miller, F.K., Powell, .E., Kennedy, .A., and Cossette, P.M., 1997a, Geologic-polygon attributes for digital geologic-map data bases produced by the outhern California Areal Mapping Project, version 1.0: J. . Geological urvey Open-File eport 97-860, 248 p.

McFadden, L.D., 1982, I he impacts of temporal and spatial climatic changes on alluvial soils genesis in southern California: I ucson, J niversity of Arizona, unpublished Ph.D. thesis, 430 p.